

NJAC 2:9 Avian Influenza Questions and Answers

What is Avian Influenza?

Avian Influenza (AI) is a type A influenza virus that causes respiratory disease in a variety of birds including, chickens, turkeys, pheasants, quail, ducks, geese, and guinea fowl. AI viruses can be classified into low pathogenicity (LPAI) and highly pathogenic (HPAI) forms based on the severity of the illness they cause. Most AI virus strains are low pathogenicity and typically cause little or no clinical signs in infected birds. The Organization of Epizootics, an international body that classifies and regulates animal diseases, considers LPAI to be a low risk disease and only requires specific strains to be reported (H5 & H7). LPAI also poses no known threat to human health. HPAI causes severe illness and high mortality in birds and as in the outbreak in Asia can cause disease in humans.

How is it transmitted?

Avian influenza is highly infectious and spreads primarily through direct contact between healthy birds and infected birds, and through indirect contact with contaminated equipment and materials. The virus is excreted through infected birds' feces and secretions from the nose, mouth, and eyes. The virus can remain viable at moderate temperatures for long periods in the environment and can survive indefinitely in frozen material. One gram of contaminated manure can contain enough virus to infect 1 million birds.

Why is AI considered a serious disease?

In some instances, strains of HPAI viruses can be infectious to people. Since mid-December 2003, a growing number of Asian countries have reported outbreaks of HPAI in chickens and ducks. The rapid spread of HPAI is historically unprecedented and of growing concern for human health as well as for animal health. Of great concern to the World Health Organization is the possibility that the current HPAI strains could acquire human influenza genes giving rise to human-to-human transmission and possibly another influenza pandemic in people. In addition, an outbreak of HPAI in the United States could potentially cost the U.S. poultry industry millions of dollars in losses. The 1983–84 HPAI outbreak in the Northeast United States cost nearly \$65 million, and led to the destruction of 17 million birds.

The Low Pathogenicity Avian Influenza Program

Historically, the H5 and H7 hemagglutinin subtypes of the LPAI virus have periodically been isolated from the live bird marketing (LBM) system in the United States. Although LPAI virus infections cause little or no clinical illness in poultry, there is concern that LPAI H5 and H7 subtypes have the potential to mutate into HPAI subtypes. Such mutations would cause serious harm to the U.S. commercial poultry industry.

The New Jersey Department of Agriculture (NJDA) regulations for AI include the United States Department of Agriculture's (USDA) Uniform Standards for the Prevention and Control of LPAI H5 and H7 in the Live Bird Marketing System. These standards and the LPAI program were developed as a cooperative effort of State Veterinarians, industry representatives, and other parties associated with poultry and poultry health. There are several components to the LPAI program as described below:

A. Registration

Who has to register?

Production/Supplier flocks, poultry distributors and live bird markets need to register with the NJDA, Division of Animal Health.

Why do I have to register?

Registering with the NJDA will enable us to get a better understanding of your business in order to tailor programs, regulations and the services the department offers to your specific needs. In addition, by identifying the location of poultry businesses within the state the NJDA can more effectively control disease in the event of an outbreak.

What will it cost for me to register?

Registration is free for backyard flocks and \$35 for poultry distributors and live bird markets.

How do I register?

Production/Supplier flocks, poultry distributors and live bird markets need to register with the NJDA, Division of Animal Health. Please call the Division at (609) 292-3965 for information and to request an application. Applications will also be available online at <http://www.state.nj.us/agriculture/avianinfluenza.htm>

B. Biosecurity Plan

What is biosecurity?

Biosecurity means all the cumulative measures that can or should be taken to keep disease (viruses, bacteria, fungi, protozoa, parasites) from a farm and to prevent the transmission of disease (by humans, insects, rodents, and wild birds/animals) within an infected farm or to neighboring farms.

How do I create a biosecurity plan and how much will it cost to create and implement a biosecurity plan?

A biosecurity plan can be created with the help of the Division of Animal Health at no charge. This plan does not have to be very complicated or costly. In fact, the steps that need to be taken are a matter of basic sanitation and knowledge of how the virus is spread. For example, changing your clothes or shoes after visiting another poultry farm or auction before returning to your own flock; cleaning and disinfecting your equipment, poultry houses and coops between flocks or shipments; and isolating sick birds from healthy birds.

Why should I follow a biosecurity plan when I have a small flock? (what about big flocks?)

Avian influenza infection can occur in any size flock. Wild birds and waterfowl serve as a reservoir for avian influenza and can spread the virus to your flock. By following a few simple guidelines you can cut the risk of transmission of Avian Influenza from another flock or from wild birds to your flock.

Commercial poultry flocks or large flocks generally have a biosecurity plan in place and do all that they can to minimize the risk of infection with any disease. For large flocks an outbreak of avian influenza can be devastating economically.

Are there special cleaning or disinfection solutions I will be required to use?

First, soap and water may be used to clean organic material (manure, dust, feathers, etc) from a poultry area. After the area is free of organic debris, there are several disinfectants that may be used to inactivate the influenza virus including bleach at a 1:10 dilution, Tek-trol and Virkon. To prevent a possible outbreak of avian influenza, poultry producers must use special preventative measures and precautions on the farm. If avian influenza is detected, farms must be thoroughly cleaned and disinfected. Avian influenza is inactivated by heat and drying. It is also very sensitive to most disinfectants and detergents. In order to ensure that the cleaning and disinfecting process is thorough, however, the area to be disinfected must be clear of organic material.

My biosecurity plan requires that all employees are trained in proper biosecurity techniques. How much will it cost me to have my employees trained in biosecurity?

The United States Department of Agriculture in conjunction with the NJDA, Division of Animal Health can provide biosecurity seminars at no cost to the public. In addition, our animal health technicians will review biosecurity with flock and live bird market personnel during routine testing as needed or requested.

C. Monitored Flock Program

What are the benefits of converting my flock to a monitored flock?

Participating in a monitored flock program may add value and marketability as well as ease of movement throughout the Garden State. In addition, with greater awareness and knowledge about poultry health, flock owners want assurance that they are purchasing AI free birds. By achieving monitored flock status for your birds you assure that you are selling AI free birds.

Participants in the Monitored Flock Program may also move poultry from their monitored flock throughout the live bird marketing system at any time as long as their monthly tests remain negative.

D. Testing for AI

How will AI testing be conducted?

A state or federal technician will visit your flock to check for signs of disease and to sample up to 30 birds for Avian Influenza. The sampling process is quick and easy. Under most circumstances, gallinaceous birds (chickens, turkeys, guinea fowl) are tested by swabbing the trachea or the inside of the mouth, and waterfowl are tested by swabbing the cloaca. Doves, including pigeons, do not require testing because they do not shed the virus.

Why does NJ require 30 birds to be tested negative for AI when other states require less?

The NJDA requires 30 birds to be sampled negative for Avian Influenza testing in accordance with the USDA's Uniform Standards for the Prevention and Control of H5 and H7 LPAI in the Live Bird Marketing System. The USDA requires that at least 30 birds test negative to be 95% confident that the Avian Influenza virus is not circulating in a flock (this number was derived from statistical calculations and science based on how easily the virus is transmitted through a flock).

How accurate is the AI testing? (will I ever get a false positive?)

Polymerase Chain Reaction tests are performed on tracheal swabs from poultry as a preliminary screening method for detecting all AI viruses. This preliminary screening test is extremely sensitive for detecting any type A avian influenza virus. Once it is determined that an AI virus is present, the virus is cultured to determine its subtype and pathogenicity (low pathogenicity vs. highly pathogenic). This subtyping is necessary because some low pathogenic subtypes have the capacity to mutate into more virulent strains. False positive results are rare and additional test are performed to ensure that the initial test results were accurate.

E. Record Keeping and Poultry Forms

Why do I need to maintain my records for 12 months?

By maintaining your records for 12 months you can provide assurance that the birds you purchase and sell were tested negative for AI. Should these birds test positive at a later date you have proof that the birds were negative when you owned them. Properly maintained records can also allow for rapid traceback and control during any disease outbreak.

Why do I need to provide a poultry invoice when I sell birds?

A poultry invoice will assure consumers that the birds they purchase from you have tested negative for Avian Influenza. Proper records of transfer of ownership can also allow for rapid traceback and control during any disease outbreak.

Where can I get the forms required under this rule?

Forms required under this rule can be obtained by calling the NJDA, Division of Animal Health at (609) 292-3965 or visiting the Avian Influenza website at the following link: <http://www.state.nj.us/agriculture/avianinfluenza.htm>

F. Penalties

Why are there penalties in this rule?

There are penalties in the Avian Influenza rule to ensure that all stakeholders involved in the live bird marketing system comply with the regulations set forth by the NJDA. While many people follow the rules by testing their birds before movement, maintaining proper records and cleaning and disinfecting as needed, there are always a few people that think they can cut corners to make money. These regulations are enforced to ensure the health and quality of the poultry in the State of New Jersey. Outbreaks of Avian Influenza are not only devastating economically but have serious human implications as well.